

Letter by Heegaard et al Regarding Article, “Sudden Cardiac Arrest and Death Following Application of Shocks From a TASER Electronic Control Device”

To the Editor:

The TASER International’s Scientific Medical Advisory Board read with interest the medical expert series from Dr Zipes.¹

Complete, balanced, and impartial medical expert testimony are important contributors to advancing medical science. In this series, we believe that Dr Zipes missed or disregarded crucial information. Cases 4 and 5 are examples; there are others. In case 4, video, acoustic, forensic, and probe analysis indicate no contact made between the TASER probe and the suspect’s chest. The emergency medical technician paramedic present documented and testified under oath that both pulse and respirations were present for >8 minutes after electronic control device (ECD) deployment.² Dr Zipes, as an expert witness in this case, either missed or disregarded this information. For case 5, every medical personnel interpreted all of the rhythm strips (3 cardiac rhythm strips by emergency medical services personnel and 1 by an emergency medical physician) as asystole, whereas Dr Zipes chose fine ventricular fibrillation (personal communication with Michael Brave and Rich versus Taser Testimony, Taser International, May 28, 2012).

ECD safety has been demonstrated in large, independent epidemiological studies,³ and studies show ECDs reduce suspect injuries by approximately two thirds.⁴ Approximately 3 million ECD applications have occurred worldwide (personal communication with S Tuttle, TASER International, May 28, 2012). We believe that the case series from Dr Zipes must be put into context. Even assuming arguendo that these deaths were ECD caused, which we do not agree with, these must be compared with the ≈80 000 lethal force uses avoided by 1 600 000 ECD applications.⁵ In comparison, cardiac electrophysiologists warn patients that routine procedures have mortality risks of ≥1:10 000. ECD use is not risk free. Practice advances, in medicine or law enforcement, always have potential complication rates.

Since January 2005, TASER’s training materials have included the Pacing and Clinical Electrophysiology (PACE) study’s conclusions that, “[t]he safety index for an [ECD] discharge was shown to have a significant and positive association to weight. Discharge levels for standard electric [ECDs] have an extremely low probability of inducing [ventricular fibrillation].” As Dr Zipes notes, in 2009 TASER recommended avoidance of ECD chest deployments if possible. The caveat “if possible” is crucial because officers do not always have the luxury to accurately aim during dynamic confrontations. TASER proactively made the conservative recommendation without definite data support because of public concerns that ECDs might have a cardiac effect, albeit miniscule. We are committed to continuous improvement and product safety.

In recognizing the scientific and societal importance of this article, we are also concerned that Dr Zipes served as a legal expert in 100% of the series’ cases. We acknowledge his disclosure that he serves as an expert witness in plaintiff ECD death cases. It is our opinion that this role may have introduced bias into his interpretation of the facts in several of his article’s cases.

Our belief is that some agencies may take Dr Zipes’ article as de facto science based on an American Heart Association imprimatur. This interpretation could result in the removal of ECDs from field use, setting officers back 30 years to use potentially more lethal force, with the possibility that lives will be unnecessarily lost and engendering increased litigation against police.

Disclosures

Drs Heegaard, Halperin, and Luceri serve on the Taser Scientific Medical Advisory Board (>\$10 000). Dr Heegaard is a modest shareholder of Taser International stock (<\$10 000). Dr Luceri has served as an expert witness in medical legal cases involving Taser International (>\$10 000).

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